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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,812	09/22/2003	Jason M. Ortega	IL-11083	1960

7590 09/27/2004

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EXAMINER

PATEL, KIRAN B

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/668,812

Applicant(s)

ORTEGA ET AL.

Examiner

Kiran B. Patel

Art Unit

3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 6-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/16/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

Non-Final Rejection

### **Election/Restriction**

1. During a telephone interview with Mr. Tak elected, without traverse, claims 1-6, 8 reading on Fig 1-2.

Claims 7, 9-25, are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim.

Further, claims 6, 8 are withdrawn by the Examiner from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species shown in Fig 3-4.

### **Specification**

It appears that in paragraph 0025, line 8, "313" should be "314".

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-5, as best understood, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, "a pair of lift surfaces located alongside at least one of the top surface and left and right side surfaces of the bluff body and extending to lift surface tips" fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, "one additional pair of said surfaces for generating in the flow stream a corresponding number of additional pairs of counter-rotating trailing vortices" fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, "the pairs of lift surfaces are adapted to confluence the counter-rotating trailing vortices together in the same direction" fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Labbe (4,978,162).

Regarding claims 1-5, Labbe (4,978,162) discloses in Fig. 1-9 the invention as claimed to include a pair of lift surfaces 54 located alongside the left and right side surfaces of the bluff body and extending to lift surface tips for generating in the flowstream a counter-rotating trailing vortices which confluence together in the wake of the bluff body in a direction substantially orthogonal to the flowstream, and said confluence drawing the flowstream in and around behind the trailing end to raise the pressure on the base surface and reduce the aerodynamic base drag; the lift surface tips substantially opposite directions from each other; and the pair of lift surfaces are located alongside the left and right side surfaces

of the bluff body and extend to the lift surface tips in substantially opposite directions from each other for generating a pair of counter-rotating trailing vortices which confluence together in a downward direction in the wake of the bluff body to draw the flowstream passing over the top surface down and around behind the trailing end to raise the pressure on the base surface and reduce the aerodynamic base drag.

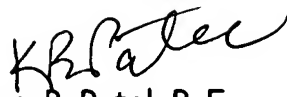
### *Conclusion*

4. The prior art made of record in attached Notice of Reference Cited (PTO-892) and not relied upon is considered pertinent to applicant's disclosure. This art of record shows various features similar to the applicant's invention.

5. Any inquiry concerning this communication or earlier communications should be directed to Primary Examiner Kiran B. Patel whose telephone number is 703-305-0254. The examiner can normally be reached on M-F from 8:00 to 5:00. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Art Unit: 3612

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Kiran B. Patel, P. E.  
Primary Examiner  
Art Unit 3612  
September 20, 2004